Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Previously Presented) A power supply apparatus for a vehicle, comprising:

an electric power line comprising a plurality of sequentially connected segments wired in an interior of a vehicle from a battery, for supplying power to various kinds of loads of said vehicle via a plurality of modules which are connected to receive electric power via respective segments of said electric power line;

a semiconductor switching element connected between each respective segment and a load supplied by said segment for controlling electric power to said load;

a plurality of short sensors for detecting a short circuit in at least one of said plurality of segments of said electric power line, said at least one segment connecting respective modules;

a power supply shutdown means connected in series with each segment of said electric power line connecting respective modules, said power supply shutdown means being connected in series with said semiconductor switching element to supply electric power to said semiconductor switching means;

a control circuit for specifying a short circuited segment of said electric power line in accordance with a short detection condition of said plurality of short sensors; and

means responsive to signals from said control circuit for cutting off the power supply cutoff means, and removing the short circuited segment from said electric power line for supplying power to said loads; wherein,

the electric power line includes a plurality of sensor electric lines which form outer layer portions of the respective segments of the electric power line, and are provided with a short detecting potential;

the sensor lines are divided into connecting portions for the respective control modules of the electric power line, or in connecting portions at a midpoint of the electric power line; and

a short circuit in a particular segment is predicted based on a change of the potential of the plurality of sensor lines.

Claim 2. (Previously Presented) A power supply apparatus for a vehicle according to claim 1, further comprising:

a connector for connecting said electric power line segments to each other arranged between respective short sensors.

Claims 3.-4. (Cancelled)

Claim 5. (Currently Amended) A power supply apparatus for a vehicle, comprising:

a battery;

a load drive electric power line wired in an interior of a vehicle from the battery through a first fuse, for driving a vehicle load;

a control circuit drive electric power line wired in said interior of said vehicle from a battery through a second fuse, for driving a control apparatus;

at least one control apparatus including a control circuit which is supplied with power from said control circuit drive electric power line, and a load drive circuit provided between said load drive electric power line and said load, for controlling a supply of a power to said load in response to a signal from said control circuit; ~~A power supply apparatus for a vehicle according to claim 3, further comprising:~~

a short sensor for detecting a short circuit of said load drive electric power line; and

a shutdown circuit for performing a shutdown of an electric line between said first fuse and said load drive circuit in response to a signal from said short circuit through said control circuit.

Claim 6. (Currently Amended) A power supply apparatus for a vehicle, comprising:

a battery;

a load drive electric power line wired in an interior of a vehicle from the battery through a first fuse, for driving a vehicle load;

a control circuit drive electric power line wired in said interior of said vehicle from a battery through a second fuse, for driving a control apparatus; and

at least one control apparatus including a control circuit which is supplied with power from said control circuit drive electric power line, and a load drive circuit provided between said load drive electric power line and said load, for controlling a supply of a power to said load in response to a signal from said control circuit; ~~A power supply apparatus for a vehicle according to claim 3,~~ wherein:

said control apparatus includes a communication control circuit;

said at least one control apparatus comprises a first control apparatus and a second control apparatus which are connected to each other by a communication line; and

supply and interruption of power to a load of said second control apparatus is controlled in response to a condition of a switch which is inputted to said first control apparatus.

Claims 7.-10. (Cancelled)

Claim 11. (Currently Amended) A load control module of an electric power supply apparatus for a vehicle, said load control module comprising:

a communication circuit which is connectable to at least one other module of said power supply apparatus through a communication line;

a control circuit connected to said communication circuit, for outputting a load control signal in accordance with a signal which is inputted through said communication circuit;

a drive circuit connected to an electric power line that is coupled between said control module and said other module, [[for]] said drive circuit controlling a power supply to a first load component of said vehicle in accordance with an output signal from said control circuit; and

a relay for opening and closing a connection ~~that branches from~~ between said power line [[to]] and a ~~particular~~ second load component, as a function of an output from said control circuit, said relay opening and closing in response to load control signals output from said control circuit; wherein,

the control module includes a fuse for connecting the particular load and the relay.

Claim 12. (Currently Amended) A power supply apparatus for a vehicle according to claim 8, comprising further:

at least one of an ignition coil switch and an accessory switch connected to said battery through a fourth fuse; and

a separate power supply system for supplying power from said at least one of an ignition coil switch and an accessory switch, to further load component, through a fifth fuse.

Claims 13.-20. (Cancelled)

21. (Previously Presented) A power supply apparatus for an automobile, comprising:

a rear control module installed in an area which is rearward of a driver's seat of the automobile;

a front control module installed in an area which is forward of said driver's seat of the automobile;

a central control module installed between said front control module and said rear control module;

a rear electric power line for connecting said rear control module and a battery;

a front electric power line for connecting said front control module and said central control module to said battery;

an ignition switch connected to an input interface of said central control module;

an ignition relay coil connected to an output interface of said front control module;

an ignition relay contact which closes and opens in response to a signal of said ignition switch which is inputted to a communication circuit of said front control module from said central control module;

a specific load to which power from said front side electric power line is supplied and interrupted through said ignition relay contact; and

at least one additional load to which electric power from the rear electric power is supplied and interrupted through the driver circuit of the rear control module;

wherein, a fusible link is connected between the input side terminal and the output side terminal of the ignition relay.

22. (Previously Presented) A power supply apparatus for an automobile according to claim 21, further comprising:

a fuse connected between said ignition relay contact and said specific load.

23. (Previously Presented) A power supply apparatus for an automobile according to claim 22, wherein:

said specific load is one of an alternator and a stator.

24. (Previously Presented) A power supply apparatus for an automobile according to claim 22, wherein said ignition relay and said fuse are received in a relay/fuse box provided adjacent to said control.

25. (Previously Presented) A power supply apparatus for an automobile, comprising:

a load drive control circuit provided between a power supply of said automobile and a specific load;

a relay provided between said load drive control circuit and said power supply;

a sleep control circuit for opening a relay contact by stopping the current in flowing a coil of said relay and performing a shutdown of an electric line to said specific load in response to detection that the automobile is not operated and power is not needed in said specific load.